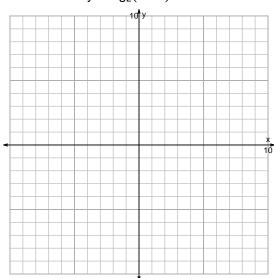
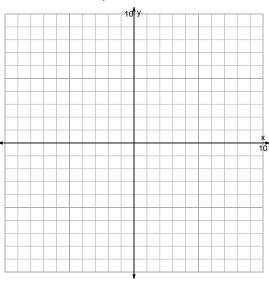
s18quiz: EXP LOG (QUIZ v298)

1. Graph $y = \log_2(x-5) - 6$ and $y = 2^{x+3} - 6$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = \log_2(x-5) - 6$$



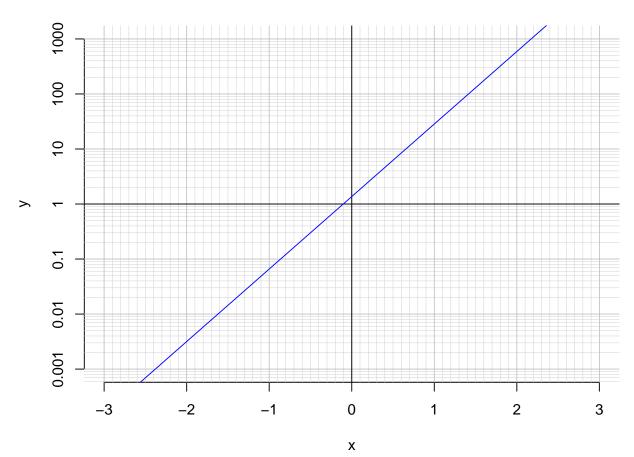
$$y = 2^{x+3} - 6$$



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-23 = \left(\frac{-5}{4}\right) \cdot 10^{-3t/7}$$

3. An exponential function $f(x) = 1.37 \cdot e^{3.03x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate f(-0.5).

- b. Express $f^{-1}(x)$, the inverse of f.
- c. Using the plot above, evaluate $f^{-1}(800)$.